

Attorney's Docket No. 99-0225  
Client's Docket No. CMB101

**PATENT Utility APPLICATION COVER SHEET**

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Sir:

Transmitted herewith for filing is the utility patent application  
of:

INVENTOR: JAMES T DISHON  
ANTHONY C JOHNSON

FOR: MATERIAL CUTTING AND FEEDING MACHINE

**Enclosed are:**


- X** Postcard for receipt stamp and return.
- X** Applicant's Check for **\$380.00**, covering fees calculated below.
- X** Specification with Claims, Abstract, & Declaration & Power of Attorney
- X** A verified statement to establish small entity status under 37C.F.R § 1.9 and 37 C.F.R. § 1.27.
- X** 3 sheets of drawing.  
Cover Sheet & Assignment to: \_\_\_\_\_  
Information Disclosure Statement.

**The filing fee has been calculated as shown below:**

	(Col. 1) No. Filed	(Col. 2) No. Extra		SMALL ENTITY RATE FEE
FOR:				
BASIC FEE			\$380	<b>\$380</b>
TOTAL CLAIMS	<b>12</b>	-20=	<b>0</b> x09	<b>0</b>
INDEPENDENT CLAIMS	<b>3</b>	- 3=	<b>0</b> x39	<b>0</b>
MULTIPLE DEPENDENT CLAIMS PRESENTED			+125	
<b>TOTAL</b>				<b>\$380</b>

DEPOSIT ACCOUNT AUTHORIZATION

The Commissioner is hereby authorized to charge any fees, which are not otherwise submitted and which may be required under 37 CFR 1.17 during the entire pendency of this application, to the Deposit Account # **11-0020**.

  
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November 12, 1999  
Date

Attorney's Docket No. 99-0225  
Client's Docket No. CMB101

**In the United States Patent and Trademark Office**

In re Application of:

JAMES T DISHON

ANTHONY C JOHNSON

Filed: **UTILITY PATENT APPLICATION**

For: MATERIAL CUTTING AND FEEDING MACHINE

Assistant Commissioner for Patents and Trademarks  
Washington, D.C. 20231

Date of Deposit: November 12, 1999

I hereby certify that the attached U.S. Patent Application, informal drawings, transmittal letter, priority document, and/or Preliminary Amendment are being deposited with the United States Postal Service under Express Mail service **#EL**

**248492715 US** on the date indicated above and is addressed to the Box Patent Application, Assistant Commissioner for Patents, Washington, D.C. 20231.

November 12, 1999  
Date

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Applicant or Patentee: **JAMES T. DISHON**  
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Serial or Patent Number:

Filed or Issued:

For: **MATERIAL CUTTING AND FEEDING MACHINE**

**VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY  
STATUS (37 CFR 1.9(f) and 1.27(b) - INDEPENDENT INVENTOR**

As a below named inventor, I hereby declare that I qualify as an independent inventor as defined in 37 CFR 1.9(c) for purposes of paying reduced fees under section 41(a) and (b) of Title 35, United States Code, to the Patent and Trademark Office with regard to the invention entitled as above and described in:

- ☒ the specification filed herewith.  
☐ application serial number \_\_\_\_\_, filed \_\_\_\_\_.  
☐ patent no. \_\_\_\_\_, issued \_\_\_\_\_.

I have not assigned, granted, conveyed or licensed and am under no obligation under contract or law to assign, grant, convey or license, any rights in the invention to any person who could not be classified as an independent inventor under 37 CFR 1.9(c) if that person had made the invention, or to any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).

Each person, concern or organization to which I have assigned, granted, conveyed, or licensed or am under obligation under contract or law to assign, grant, convey, or license any rights in the invention is listed below:

- ☒ no such person, concern, or organization  
☐ persons, concerns or organizations listed below\*

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FULL NAME: NOT APPLICABLE ☐ INDIVIDUAL  
ADDRESS: NOT APPLICABLE ☐ SMALL BUSINESS CONCERN  
☐ NONPROFIT ORGANIZATION

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate (37CFR 1.28(b)).

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

NAME OF INVENTOR: **JAMES T. DISHON**

James T. Dishon  
Inventor's Signature

Date: 8/30/99

NAME OF INVENTOR: **ANTHONY C. JOHNSON**

Anthony C. Johnson  
Inventor's Signature

Date: 8/30/99

Attorney's Docket No. K&A 99-0225  
Client's Docket No. CMB101

**APPLICATION**

**FOR UNITED STATES LETTERS PATENT**

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**SPECIFICATION**

TO ALL WHOM IT MAY CONCERN:

BE IT KNOWN THAT WE, **JAMES T. DISHON**, a citizen of UNITED STATES OF AMERICA, and **ANTHONY C. JOHNSON**, a citizen of UNITED STATES OF AMERICA, have invented a new and useful **MATERIAL CUTTING AND FEEDING MACHINE** of which the following is a specification:

# MATERIAL CUTTING AND FEEDING MACHINE

5

## BACKGROUND OF THE INVENTION

### Field of the Invention

10

The present invention relates to paper cutting machines and more particularly pertains to a new material cutting and feeding machine for cutting and perforating a roll of paper.

15

### Description of the Prior Art

20

The use of paper cutting machines is known in the prior art. More specifically, paper cutting machines heretofore devised and utilized are known to consist basically of familiar, expected and obvious structural configurations, notwithstanding the myriad of designs encompassed by the crowded prior art which have been developed for the fulfillment of countless objectives and requirements.

25

Known prior art includes U.S. Patent No. 5,235,882; U.S. Patent No. 5,431,077; U.S. Patent No. 3,986,419; U.S. Patent No. 4,907,014; U.S. Patent Des. No. 340,067; and U.S. Patent No. 4,293,236.

30

While these devices fulfill their respective, particular objectives and requirements, the aforementioned patents do not disclose a new material cutting and feeding machine. The inventive

device includes a generally rectangular frame. A material feeding roller is mounted to the frame. The feeding roller is adapted to hold a roll of paper. A motor is adapted to rotate a draw roller assembly that draws the paper from the paper roll. A cutting means  
5 is mounted adjacent to the draw roller. The cutting means comprises a latitudinal perforating bar adapted to perforate the paper along a width of the paper, a perforating wheel adapted to perforate a length of the paper, and a latitudinal cutting bar adapted to cut the paper along the width of the paper. A guide roller  
10 assembly comprised of four rollers and two guides is orientated to feed the paper from the paper cutter to an exit in the frame.

In these respects, the material cutting and feeding machine according to the present invention substantially departs from the  
15 conventional concepts and designs of the prior art, and in so doing provides an apparatus primarily developed for the purpose of cutting and perforating a roll of paper.

## **SUMMARY OF THE INVENTION**

20 In view of the foregoing disadvantages inherent in the known types of paper cutting machines now present in the prior art, the present invention provides a new material cutting and feeding machine construction wherein the same can be utilized for cutting  
25 and perforating a roll of paper.

The general purpose of the present invention, which will be described subsequently in greater detail, is to provide a new material cutting and feeding machine apparatus and method which  
30 has many of the advantages of the paper cutting machines mentioned heretofore and many novel features that result in a new material cutting and feeding machine which is not anticipated,

rendered obvious, suggested, or even implied by any of the prior art paper cutting machines, either alone or in any combination thereof.

To attain this, the present invention generally comprises a  
5 generally rectangular frame. A material feeding roller is mounted to the frame. The feeding roller is adapted to hold a roll of paper. A motor is adapted to rotate a draw roller assembly that draws the paper from the paper roll. A cutting means is mounted adjacent to the draw roller. The cutting means comprises a latitudinal  
10 perforating bar adapted to perforate the paper along a width of the paper, a perforating wheel adapted to perforate a length of the paper, and a latitudinal cutting bar adapted to cut the paper along the width of the paper. A guide roller assembly comprised of four rollers and two guides is orientated to feed the paper from the  
15 paper cutter to an exit in the frame.

There has thus been outlined, rather broadly, the more important features of the invention in order that the detailed description thereof that follows may be better understood, and in  
20 order that the present contribution to the art may be better appreciated. There are additional features of the invention that will be described hereinafter and which will form the subject matter of the claims appended hereto.

In this respect, before explaining at least one embodiment of the invention in detail, it is to be understood that the invention is not limited in its application to the details of construction and to the arrangements of the components set forth in the following description or illustrated in the drawings. The invention is capable  
25 of other embodiments and of being practiced and carried out in various ways. Also, it is to be understood that the phraseology and  
30



terminology employed herein are for the purpose of description and should not be regarded as limiting.

As such, those skilled in the art will appreciate that the  
5 conception, upon which this disclosure is based, may readily be  
utilized as a basis for the designing of other structures, methods  
and systems for carrying out the several purposes of the present  
invention. It is important, therefore, that the claims be regarded as  
including such equivalent constructions insofar as they do not  
10 depart from the spirit and scope of the present invention.

Further, the purpose of the foregoing abstract is to enable the  
U.S. Patent and Trademark Office and the public generally, and  
especially the scientists, engineers and practitioners in the art who  
15 are not familiar with patent or legal terms or phraseology, to  
determine quickly from a cursory inspection the nature and essence  
of the technical disclosure of the application. The abstract is  
neither intended to define the invention of the application, which is  
measured by the claims, nor is it intended to be limiting as to the  
20 scope of the invention in any way.

It is therefore an object of the present invention to provide a  
new material cutting and feeding machine apparatus and method  
which has many of the advantages of the paper cutting machines  
25 mentioned heretofore and many novel features that result in a new  
material cutting and feeding machine which is not anticipated,  
rendered obvious, suggested, or even implied by any of the prior art  
paper cutting machines, either alone or in any combination thereof.

30 It is another object of the present invention to provide a new  
material cutting and feeding machine which may be easily and  
efficiently manufactured and marketed.

It is a further object of the present invention to provide a new material cutting and feeding machine which is of a durable and reliable construction.

5

An even further object of the present invention is to provide a new material cutting and feeding machine which is susceptible of a low cost of manufacture with regard to both materials and labor, and which accordingly is then susceptible of low prices of sale to the consuming public, thereby making such material cutting and feeding machine economically available to the buying public.

Still yet another object of the present invention is to provide a new material cutting and feeding machine which provides in the apparatuses and methods of the prior art some of the advantages thereof, while simultaneously overcoming some of the disadvantages normally associated therewith.

Still another object of the present invention is to provide a new material cutting and feeding machine for cutting and perforating a roll of paper.

Yet another object of the present invention is to provide a new material cutting and feeding machine which includes a generally rectangular frame. A material feeding roller is mounted to the frame. The feeding roller is adapted to hold a roll of paper. A motor is adapted to rotate a draw roller assembly that draws the paper from the paper roll. A cutting means is mounted adjacent to the draw roller. The cutting means comprises a latitudinal perforating bar adapted to perforate the paper along a width of the paper, a perforating wheel adapted to perforate a length of the paper, and a latitudinal cutting bar adapted to cut the paper along

the width of the paper. A guide roller assembly comprised of four rollers and two guides is orientated to feed the paper from the paper cutter to an exit in the frame.

5           Still yet another object of the present invention is to provide a new material cutting and feeding machine that will allow users to use rolls of paper which can be cut down into pieces of paper smaller than a standard sheet to save on resources.

10           Even still another object of the present invention is to provide a new material cutting and feeding machine that will perforate the paper both along a width and a length. The ability to perforate the paper allows the user multiple uses such as creation of billing statements from regular stock paper.

15           These together with other objects of the invention, along with the various features of novelty which characterize the invention, are pointed out with particularity in the claims annexed to and forming a part of this disclosure. For a better understanding of the  
20           invention, its operating advantages and the specific objects attained by its uses, reference should be made to the accompanying drawings and descriptive matter in which there are illustrated preferred embodiments of the invention.

## 25   **BRIEF DESCRIPTION OF THE DRAWINGS**

          The invention will be better understood and objects other than those set forth above will become apparent when consideration is given to the following detailed description thereof. Such  
30           description makes reference to the annexed drawings wherein:

Figure 1 is a schematic perspective view of a new material cutting and feeding machine according to the present invention.

Figure 2 is a schematic side view of the present invention.

Figure 3 is a schematic expanded view of the cutting mechanism of the present invention.

Figure 4 is a schematic cross-section view of the cutting blade of the present invention.

Figure 5 is a schematic cross-section view the perforating blade of the present invention.

Figure 6 is a schematic front view of the perforating wheel of the present invention.

Figure 7 is a schematic plan view of paper cut using the present invention.

## DESCRIPTION OF THE PREFERRED EMBODIMENT

With reference now to the drawings, and in particular to Figures 1 through 7 thereof, a new material cutting and feeding machine embodying the principles and concepts of the present invention and generally designated by the reference numeral 10 will be described.

As best illustrated in Figures 1 through 7, the material cutting and feeding machine 10 generally comprises a rectangular frame 11 wherein the frame has an inside portion 13 and an outside portion 14. The frame supports a first 15, second 16 and third 17 paper cutting and delivering means.

The first paper cutting and delivering means comprises a material feeding roller means 18 wherein the roller means is attached to the outside portion of the frame. The feeding roller means is adapted to feed a continuous roll of paper 19 into the frame such that the paper is horizontal to the floor.

Preferably, a pressing means is mounted to the inside of the frame wherein the pressing means is adapted to flatten the paper. Pressing the paper allows it to travel smoother through a cutting apparatus without the edges of the paper curling. The pressing means is adjacent to the feeding means. The pressing means is comprised of a first draw roller assembly 20, a tension roller 21 and a second draw roller assembly 22. The tension roller has a spring 23 attached thereto adapted to apply downward tension on the tension roller. The first and the second draw roller assemblies are comprised of two rollers. Preferably, the second draw roller is in fluid connection with a sensor 25. The sensor rotates the second draw roller to pull the paper into the frame. The sensor is adapted to measure a length of the paper for cutting purposes. The machine can be set up without only one draw roller assembly which can pull the paper into the machine. Also, the sensor is optional as the machine can be adapted to use a standard length of paper for cutting purposes.

A motor 27 is preferably rotationally coupled to the sensor means. The motor means rotates the sensor means. If a sensor is not used, then the motor is coupled to one of the draw rollers directly.

A cutting means is mounted adjacent to the second draw roller 22. The cutting means comprises a longitudinal perforating wheel 30 adapted to perforate the paper along a length of the paper, a latitudinal perforating bar 32 adapted to perforate the paper along a

width of the paper, and a latitudinal cutting bar 34 adapted to cut the paper along the width of the paper. Ideally, all three cutters are included, however, only the cutting bar is required. All three sit in a casing 36. The casing has two sub-casings 31, 33 which lift up the bar cutters when they are not being used and engages the cutters when cutting is required. The perforating wheel is attached to a belt 35 which pulls the wheel to the left or right depending on where the user would like vertical perforations in the page. In another embodiment, not shown, a plurality of perforation wheels are used.

A paper holder 38 is mounted in the frame. The paper holder is slidably mounting into the frame so that the paper holder can be accessed by pulling the paper holder from the frame. The paper holder has a handle 39 to pull the holder out with.

A first guide roller assembly mounted between the cutting means and the paper holder comprises two rollers 40 and two guide bars 42 adapted to direct the paper into the paper holder.

A second guide roller assembly comprised of four rollers 44 and two guides 46 is adapted to feed the paper from the paper holder to an exit in the frame.

The second 16 and the third 17 paper cutting and delivery means are substantially identical to the first paper cutting and delivery means. The second means is mounted below the first means, and the third means is mounted below the second means whereby all three cutting and delivery means are mounted parallel to each other and all direct paper from a first end 48 of the frame to a second end 49 of the frame. Preferably, the paper holder 50 of the second means is larger than the paper holder 38 of the first means. A paper holder 51 of the third means is larger than the paper holder of the second means 50.

The exit in the frame comprises two rollers 55 and an opening in the frame 56. The exit is adapted to receive paper from each of the cutting and delivery means.

5 An actuating means 60 is operationally coupled to each of the cutting means and to each of the motor means. Preferably, the actuating means is in the form of a keypad 62 and is adapted to be programmable for variable cutting and perforating patterns.

All rollers depicted in the figures are cylindrical in shape. All parts can be mounted to the frame by any mounting means  
10 known in the art, however, bolts and screw work ideally as they can be removed for repair or refitting. The frame can be sized according to its use for either printers or copiers.

In use, the user loads paper onto the feeding roller 18. Though not preferred, single sheets can be fed through the opening  
15 used by the feeding roller as the machine will still perforate and cut single sheets of paper. The paper is fed through the draw rollers 20, 22 and the tension roller 21. The second draw roller 22 rotates as the sensor 25 which is attached to it rotates. The sensor determines the length of paper to enter the frame depending on the  
20 particular program selected. As the paper is fed through the cutters, perforations and cuts are made in the paper as directed by the programmer. The paper then travels through the guide rollers 42 to the paper tray 38. This tray can store paper cut by the machine for later use, or it can be opened and precut paper can be  
25 placed into the holder. The paper next enters the next set of guide rollers 44 and is fed to the exit out the back side 49 of the frame and into a printer or copier. Figure 7 most clearly demonstrates the result of running paper through the machine. The dashed lines indicated perforations. The dashed line 70 running in the direction  
30 of paper feeding is made with the perforation wheel. The other

perforated line 71 is made with the perforation bar. The solid cut 72 is made with the cutting bar.

As to a further discussion of the manner of usage and  
5 operation of the present invention, the same should be apparent from the above description. Accordingly, no further discussion relating to the manner of usage and operation will be provided.

With respect to the above description then, it is to be realized  
10 that the optimum dimensional relationships for the parts of the invention, to include variations in size, materials, shape, form, function and manner of operation, assembly and use, are deemed readily apparent and obvious to one skilled in the art, and all  
equivalent relationships to those illustrated in the drawings and  
15 described in the specification are intended to be encompassed by the present invention.

Therefore, the foregoing is considered as illustrative only of the principles of the invention. Further, since numerous  
20 modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention.



## CLAIMS

We claim:

1. A machine for cutting and feeding sheet material comprising:
  - a frame, said frame being generally rectangular;
  - a paper cutting and delivering means comprising:
    - a material feeding roller means mounted to said frame, said feeding roller means adapted to a hold a roll of paper;
    - a motor means adapted to rotate a draw roller assembly, wherein said draw roller assembly being adapted to draw said paper from said paper roll;
    - a cutting means, said cutting means being mounted adjacent to said draw roller, said cutting means comprising a latitudinal perforating bar adapted to perforate said paper along a width of said paper, and a latitudinal cutting bar adapted to cut said paper along said width of said paper;
    - a guide roller assembly comprised of four rollers and two guides orientated to feed said paper from said paper cutter to an exit in said frame; and
    - an actuating means operationally coupled to said cutting means and to said motor means.

2. The machine for cutting and feeding sheet material as stated in claim 2, wherein said frame has an inside portion and an outside portion whereby said material feeding roller means is mounted to said frame on said outside of said frame.

3. The machine for cutting and feeding sheet material as stated in claim 2, wherein said draw roller assembly further comprises:

a first pair of rollers, a tension roller and a second pair of rollers, said tension roller having a spring attached thereto adapted to apply downward tension on said tension roller wherein said second pair of rollers being rotated by said motor means.

4. The machine for cutting and feeding sheet material as stated in claim 3, further comprising a sensor, wherein said sensor measures a length of said paper, said sensor being between said motor means and said second pair of roller wherein said sensor being adapted to rotate said second pair of rollers.

5. The machine for cutting and feeding sheet material as stated in claim 4, wherein said cutting means further comprises a longitudinal perforating wheel, wherein said perforating wheel perforates said paper along a length of said paper.

6. The machine for cutting and feeding sheet material as stated in claim 5, further comprising:

a paper holder being mounted in said frame, said paper holder being between said cutting means and said guide roller assembly;

a second guide roller assembly mounted between said cutting means and said paper holder, said second guide roller assembly comprising two rollers and two guide bars adapted to direct said paper into said paper holder.

7. The machine for cutting and feeding sheet material as stated in claim 6, wherein said frame further contain a second and a third paper cutting and delivery means being substantially identical as said first paper cutting and delivery means, said second means being mounted below said first means, said third means being mounted below said second means whereby all three cutting and delivery means are mounted parallel to each other and all direct paper from a first end of said frame to a second end of said frame.

8. The machine for cutting and feeding sheet material as stated in claim 7, wherein said first paper cutting and delivery means is adapted to hold paper of a different width than said second and third paper cutting and delivering means, said second paper cutting and delivery means being adapted to hold paper of a different width than said third paper cutting and feeding means.

9. The machine for cutting and feeding sheet material as stated in claim 8, and further comprising an actuating means operationally coupled to each of said cutting means and to each of said motor means, said actuating means being adapted to be programmable for variable cutting and perforating patterns.

10. The machine for cutting and feeding sheet material as stated in claim 9 wherein said paper holders being slidably

mounting into said frame wherein said paper holders can be accessed by pulling said paper holders from said frame.

11. A machine for cutting and feeding sheet material comprising:

- a frame, said frame being generally rectangular wherein said frame has an inside portion and an outside portion;

- a paper cutting and delivering means comprising:

- a material feeding roller means wherein said roller means is attached to the outside portion of said frame, said feeding roller means being adapted to feed a continuous roll of paper into said frame such that said paper is horizontal to a floor;

- a pressing means mounted to said inside of said frame wherein said pressing means flattens said paper, said pressing means being adjacent to said feeding means, said pressing means being comprised of a first draw roller assembly, a tension roller and a second draw roller assembly, said tension roller having a spring attached thereto adapted to apply downward tension on said tension roller, said first and said second draw roller assemblies being comprised of two rollers, said second draw roller being in fluid connection with a sensor whereby said sensor rotates said second draw roller to pull said paper into

said frame wherein said sensor measures a length of said paper;

a motor means rotationally coupled to said sensor means, motor means adapted to rotate said sensor means;

a cutting means, said cutting means being mounted adjacent to said second draw roller, said cutting means comprising a longitudinal perforating wheel, a latitudinal perforating bar, and a latitudinal cutting bar, said perforating wheel perforates said paper along a length of said paper, said latitudinal perforating bar perforates said paper along a width of said paper, said latitudinal cutting bar cuts said paper along said width of said paper;

a paper holder mounted in said frame;

a first guide roller assembly mounted between said cutting means and said paper holder, said first guide roller assembly comprising two rollers and two guide bars adapted to direct said paper into said paper holder;

a second guide roller assembly comprised of four rollers and guides adapted to feed said paper from said paper holder to an exit in said frame;

said exit in said frame comprising two rollers and an opening in said frame; and

an actuating means operationally coupled to said cutting means and to said motor means, said

actuating means being adapted to be programmable for variable cutting and perforating patterns.

12. A machine for cutting and feeding sheet material comprising:

a frame, said frame being generally rectangular wherein said frame has an inside portion and an outside portion, said frame supporting a first, second and third paper cutting and delivering means;

said first paper cutting and delivering means comprising:

a material feeding roller means wherein said roller means is attached to the outside portion of said frame, said feeding roller means being adapted to feed a continuous roll of paper into said frame such that said paper is horizontal to a floor;

a pressing means mounted to said inside of said frame wherein said pressing means being adapted to flatten said paper, said pressing means being adjacent to said feeding means, said pressing means being comprised of a first draw roller assembly, a tension roller and a second draw roller assembly, said tension roller having a spring attached thereto adapted to apply downward tension on said tension roller, said first and said second draw roller assemblies being

comprised of two rollers, said second draw roller being in fluid connection with a sensor whereby said sensor rotates said second draw roller to pull said paper into said frame, said sensor being adapted to measure a length of said paper;

a motor means rotationally coupled to said sensor means, motor means adapted to rotate said sensor means;

a cutting means, said cutting means being mounted adjacent to said second draw roller, said cutting means comprising a longitudinal perforating wheel adapted to perforate said paper along a length of said paper, a latitudinal perforating bar adapted to perforate said paper along a width of said paper, and a latitudinal cutting bar adapted to cut said paper along said width of said paper;

a paper holder mounted in said frame, said paper holder being slidably mounting into said frame wherein said paper holder can be accessed by pulling said paper holder from said frame;

a first guide roller assembly mounted between said cutting means and said paper holder, said first guide roller assembly comprising two rollers and two guide bars adapted to direct said paper into said paper holder;

a second guide roller assembly comprised of four rollers and guides adapted to feed said paper from said paper holder to an exit in said frame;

said second and said third paper cutting and delivery means being substantially identical as said first paper cutting and delivery means, said second means being mounted below said first means, said third means being mounted below said second means whereby all three cutting and delivery means are mounted parallel to each other and all direct paper from a first end of said frame to a second end of said frame, a paper holder of said second means being larger than said paper holder of said first means, a paper holder of said third means being larger than said paper holder of said second means;

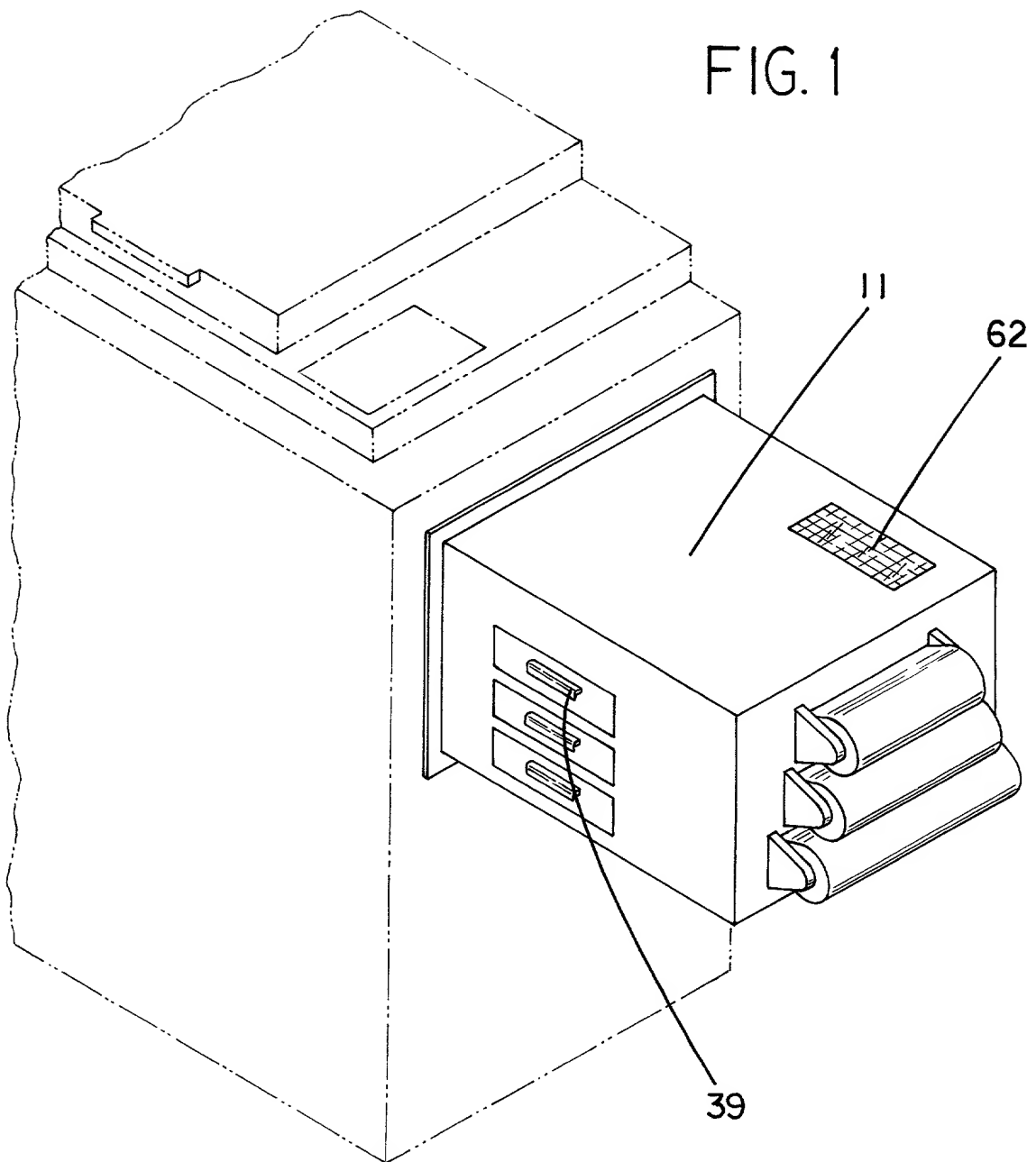
said exit in said frame comprising two rollers and an opening in said frame, said exit adapted to receive paper from each of said cutting and delivery means; and

an actuating means operationally coupled to said each of said cutting means and to each of said motor means, said actuating means being adapted to be programmable for variable cutting and perforating patterns.



**ABSTRACT OF THE DISCLOSURE**

5        A material cutting and feeding machine for cutting and  
perforating a roll of paper. The material cutting and feeding  
machine includes a generally rectangular frame. A material feeding  
roller is mounted to the frame. The feeding roller is adapted to  
hold a roll of paper. A motor is adapted to rotate a draw roller  
10    assembly that draws the paper from the paper roll. A cutting means  
is mounted adjacent to the draw roller. The cutting means  
comprises a latitudinal perforating bar adapted to perforate the  
paper along a width of the paper, a perforating wheel adapted to  
perforate a length of the paper, and a latitudinal cutting bar adapted  
15    to cut the paper along the width of the paper. A guide roller  
assembly comprised of four rollers and two guides is orientated to  
feed the paper from the paper cutter to an exit in the frame.



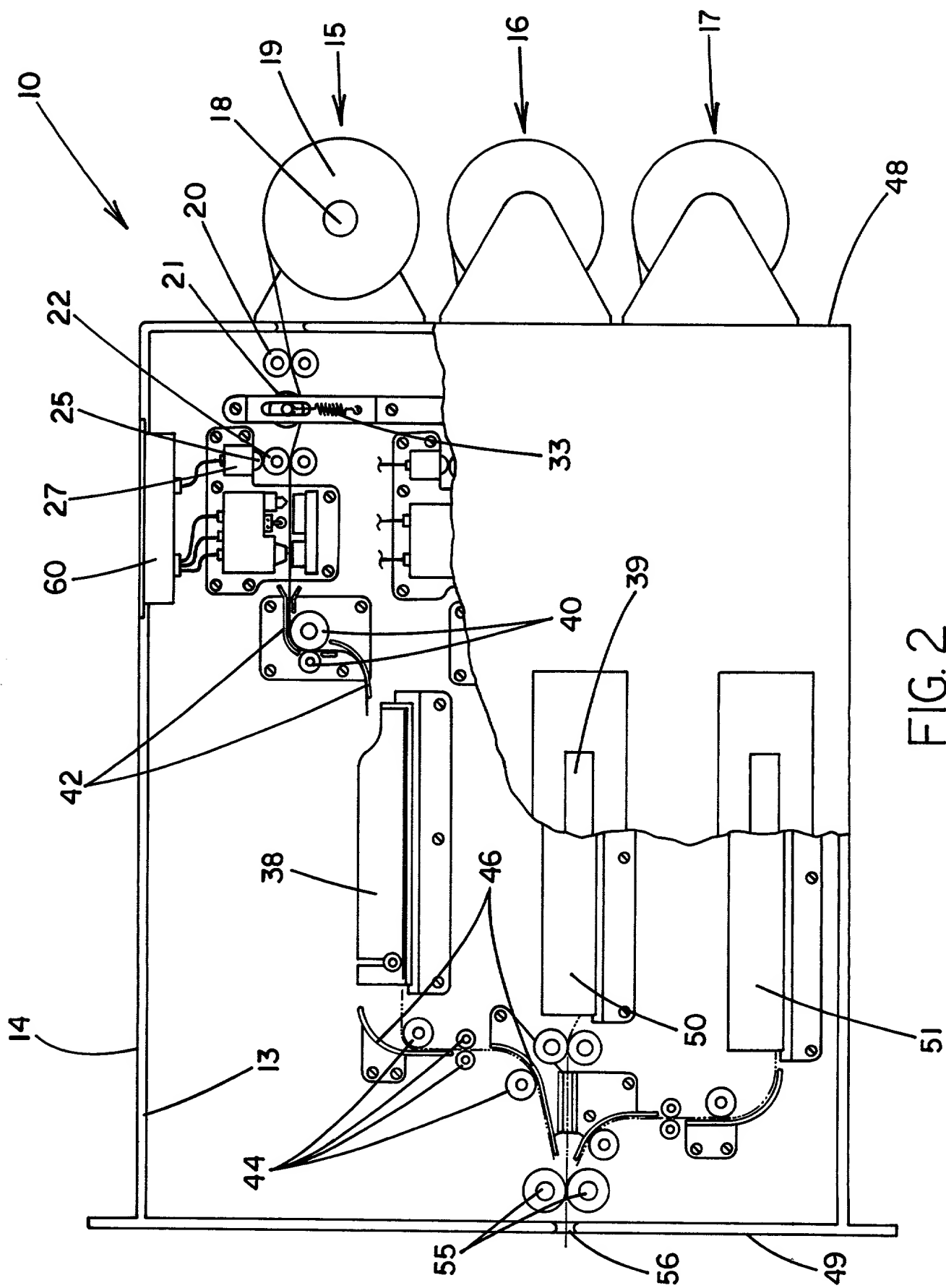
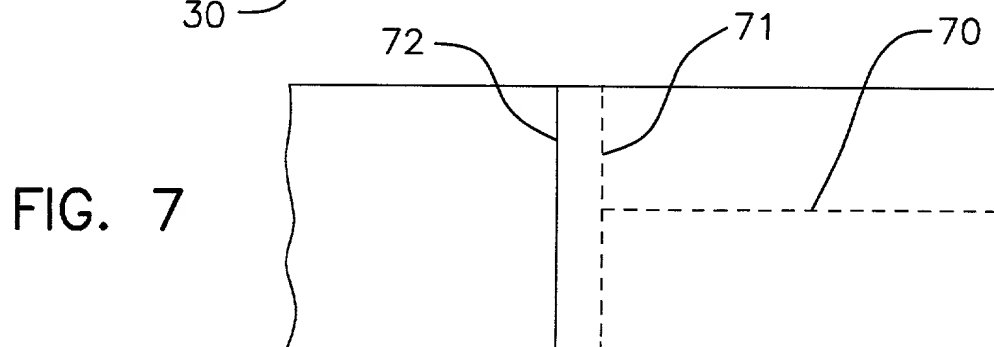
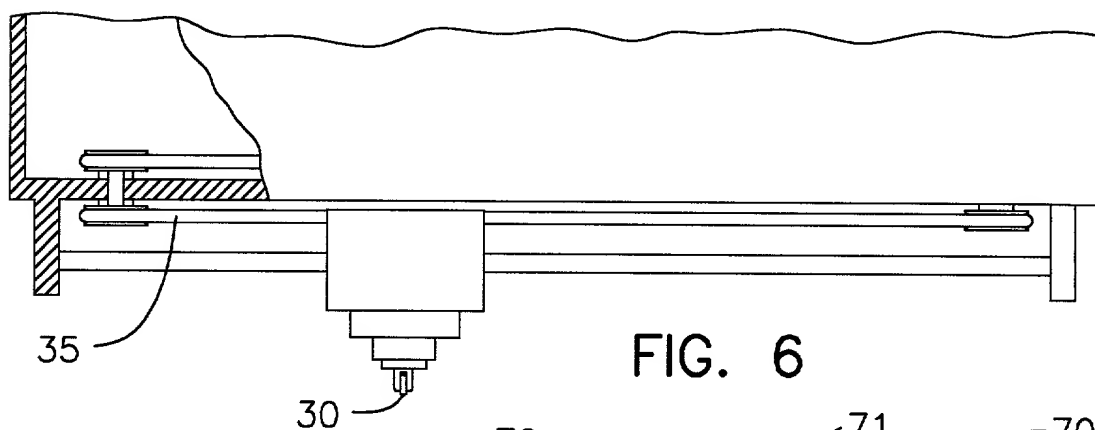
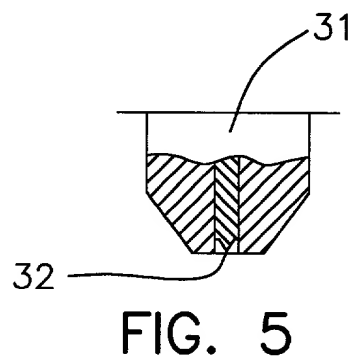
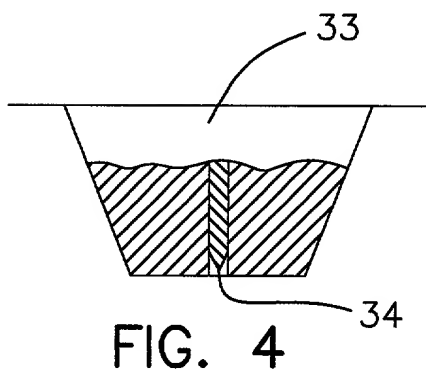
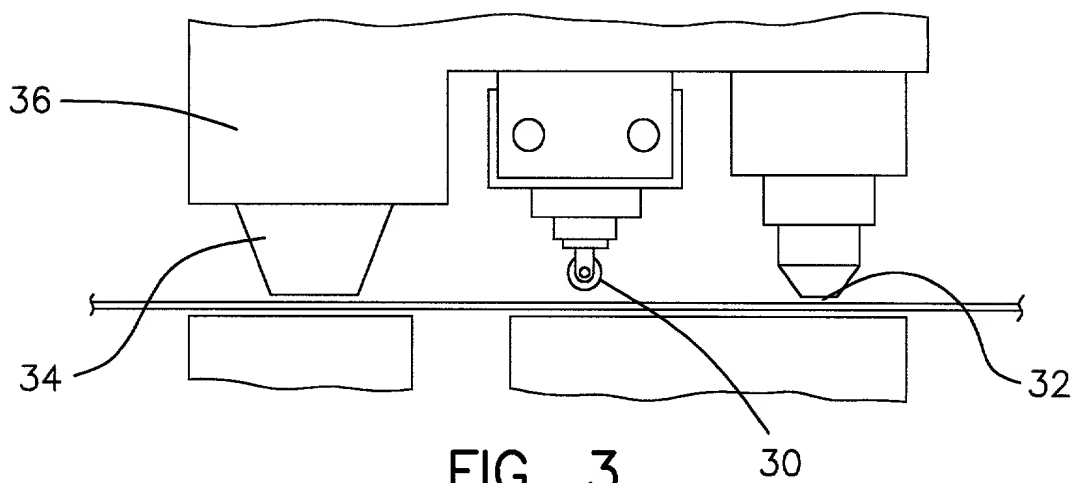


FIG. 2



## **DECLARATION AND POWER OF ATTORNEY**

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

### **MATERIAL CUTTING AND FEEDING MACHINE**

the specification of which is attached hereto.

I further state that I do not know and do not believe that the above-named invention has ever been known or used in the United States before my invention thereof, or patented or described in any printed publication in any country before my invention thereof, or in public use or on sale in the United States more than one year prior to this application; that the invention has not been patented or made the subject of any inventor's certificate in any country foreign to the United States on any application filed by me or my legal representatives or assigns more than one (1) year prior to this application; and that no application for patent or inventor's certificate on the invention has been filed by me or my representatives or assigns in any country foreign to the United States, except as identified below.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment if applicable.

I acknowledge the duty to disclose information to the Patent and Trademark Office all information known to me to be material to the examination of this application in accordance with Title 37, Code of Federal Regulations, Section 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, Section 119(a)-(d) or Section 365(b) of any foreign application(s) for patent or inventor's certificate, or Section 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below any foreign application for patent or inventor's certificate or PCT International application having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s)

Priority Claimed

NONE  
 (Number)                            
 (Country)                            
 (Day/Month/  
 Year Filed)                            
 (Yes)                            
 (No)

I hereby claim the benefit under 35 U.S.C. Section 119(e) of any United States Provisional application(s) listed below:

NONE  
 (Application No.)                            
 (Filing Date)

I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s), or Section 365 (c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of Title 35, United States Code, Section 112. I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

NONE  
 (Application No.)                            
 (Filing Date)                            
 (Status - patented,  
 pending, abandoned)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorneys to prosecute this application and transact all business in the U.S. Patent and Trademark Office connected therewith: Ivar M. Kaardal, Registration Number 29,812.

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